

Work Order ID 153804

Friday, November 25, 2016 7:43:22 AM

153804

Page 1

Item ID: D4882-1

Revision ID:

Item Name: Strut

Start Date: 12/1/2016

Start Qty: 2.00

2

Required Date: 12/8/2016

Req'd Qty: 2.00

2

Reference:

Accept

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan:

DAS
21
9-89

Date: NOV 29 2016

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D4882

C

100

0.06

100

DOOSAN LATHE

Doosan

Memo

0.36

Doosan Lathe

1- Turn as per Folio FB247

Rev: C & Dwg D4878 Rev: C

2- Deburr

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

6 _____ 110-12-07

6 _____ 110-12-07

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
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								Lead hand / Supervisor Approval Verification																	
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Root Cause		FAULT CATEGORY																							
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OTHER : ☐																									

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
3AC 1A 19-8				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 153804

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153804

Page 3

Item ID: D4882-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Strut
Start Date: 12/1/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 12/8/2016 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC5- Inspect part completeness to step on W/O	0.00							
150									
QC	Memo	0.01							DAS 38 9-89
Quality Control									DEC 13 2016
160	Identify as per dwg & Stock Location: <u>54 133</u>	0.00							
160									
Packaging	Memo	0.00							DAS 26 9-89
Packaging									DEC 13 2016
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.03							DAS 21 9-89
Quality Control									DEC 13 2016

16-12-13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Picklist Print

Friday, November 25, 2016 7:43:22 AM

Page 1

Work Order ID: 153804

153804

Parent Item: D4882-1

D4882-1

Parent Item Name: Strut

Start Date: 12/1/2016

Required Date: 12/8/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 13.12.17 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174PH-H900R0.750		Purchased			No		f	14.9830		0.861053			

M174PH-H900R0 750

17-4 SS H900 ROUND BAR 0.750"

Location

Loc Qty

Loc Code

MAT031

14.983

M129892

2.983

M136221

12

2.983

16-12-07

DQA: _____ Date: _____

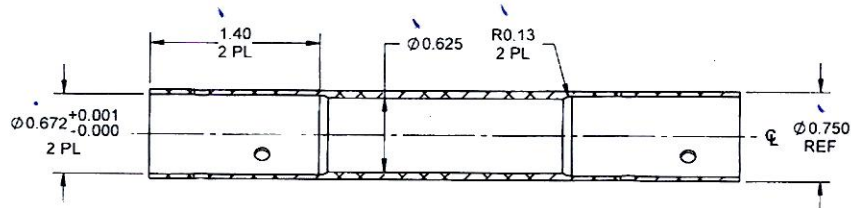


WORK ORDER NON-CONFORMANCE / UPDATE

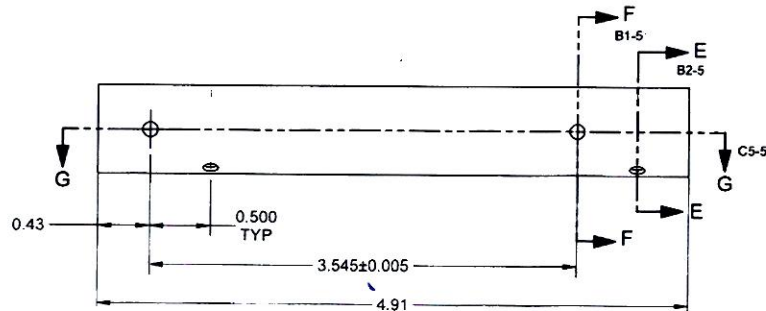
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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OTHER : ☐					

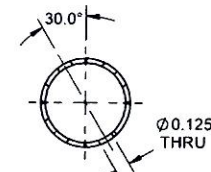


SECTION G-G B4-5

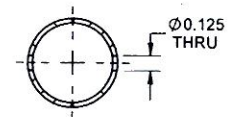


D4882-1 STRUT

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 153804 MGS
16-11-29



SECTION E-E C4-5



SECTION F-F C4-5

NOTES:

- 1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.6
- 7) WEIGHT: 0.15 lbs
- 8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

RELEASED
2014-07-07
MD

APPROVED	DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	VS		
	CHECKED	HS	DRAWING NO.	REV. C
	MFG. APPR.	JFS	D4882	SHEET 5 OF 5
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	LEG ASSEMBLY	NTS
DATE		14.06.24	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34608**

Purchase Order Date 12/13/2016

PO Print Date 12/13/2016

Page Number 3 of 4

Order From :
SKYSERVICE
6120 MIDFIELD ROAD
MISSISSAUGA, ONTARIO L5P 1B1
CANADA

VC-SKY001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905-678-5636

Ship To Contact
Ship To Phone
Ship Via: Delivered
Ship Acct:

Buyer
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

Line Total: \$84.36

6 153804 D4882-1 STRUT 12/13/2016
Yes
12/13/2016

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

6.00 \$14.06 \$84.36

Spk-12-B

Line Total: \$84.36

7 153797 D4880-1 STRUT 12/13/2016
Yes
12/13/2016

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

7.00 \$14.06 \$98.42

Line Total: \$98.42

8 154161 D4884-1 END FITTING 12/13/2016
Yes
12/13/2016

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

6.00 \$14.06 \$84.36

Note:

12/13/2016

**skyservice****Work Order Traveler**

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO30286	Customer: CASH SALE	Dept: NDT YUL	Reference: P034608
Descr:	PN: DART AERO	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	

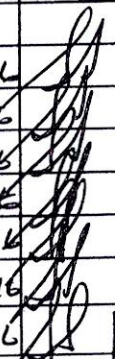
Task: UNSCHEDULED

Sequence: 1

Work Required: CARRY OUT NDT ON THE FOLLOWING ITEMS;

- ① STRUT - ITEM ID D4880-1, WO ID 153891 EA: 6
- ② END FITTING - ITEM ID D4883-5, WO ID 153892 EA: 12
- ③ END FITTING - ITEM ID D4883-3, WO ID 154164 EA: 7
- ④ END FITTING EYE - ITEM ID D4884-1 WO ID 153123 EA: 6
- ⑤ STRUT - ITEM ID D4882-1, WO ID 153804 EA: 6
- ⑥ STRUT - ITEM ID D4880-1, WO ID 153797 EA: 7
- ⑦ END FITTING EYE - ITEM ID D4884-1, WO ID 154161 EA: 6

Action Taken: LIQUID PENETRANT INSPECTION CARRIED OUT JAW ASTM E1417 ON ITEMS LISTED ABOVE	Date:	Initial/Stamp:
--	-------	----------------

- | | | |
|-------------------|-----------|--|
| ① NO CRACKS FOUND | 13 DEC 16 | 
DOT APP 19 53-89
DOT APP 19 53-89
DOT APP 19 53-89
DOT APP 19 53-89
DOT APP 19 53-89
DOT APP 19 53-89
DOT APP 19 53-89 |
| ② NO CRACKS FOUND | 13 DEC 16 | |
| ③ NO CRACKS FOUND | 13 DEC 16 | |
| ④ NO CRACKS FOUND | 13 DEC 16 | |
| ⑤ NO CRACKS FOUND | 13 DEC 16 | |
| ⑥ NO CRACKS FOUND | 13 DEC 16 | |
| ⑦ NO CRACKS FOUND | 13 DEC 16 | |

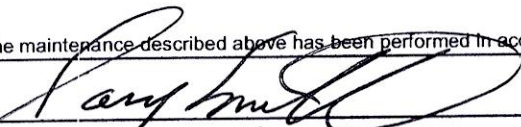
Description	Location	P/N	Qty	Batch	S/N Off	S/N On
BLACKLIGHT		T-20990N				
PENETRANT		ARDRUX 970 P25E		TPO 19388	APR 02-2018	

DAS
38
9-89
DEC 13 2016

DEC 13 2016

DAS
26
9-89

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature: 	ACA/SCA Stamp: DOT APP 19 53-89	Date: 13 DEC 2016
Name: GARY SMITH		

SKYM002-1 REV 4 Mar/14